

### **REMARKS/ARGUMENTS**

Applicant requests that the application be amended as above described. Claims 1 to 10 have been amended to clarify the invention recited therein.

#### **Drawings**

In the Office Action, the Examiner objected to the use of reference numerals "34" and "35" to refer to an induction coil. In response to the Examiner's objection to the drawings, Applicant has reviewed the drawings and respectfully notes that reference character "34" refers to an induction coil and "35" refers to an AC pulse source (both in Fig. 1).

In the Office Action, the Examiner objected to the use of reference numeral "16" to designate both beta ray receiver and induced radiation. In response to the Examiner's objection to the drawings, Applicant has reviewed the drawings and respectfully notes that reference numeral "16" refers only to an induced beta+gamma (Fig. 1).

In the Office Action, the Examiner objected to the use of reference numerals not mentioned in the description, namely 14, 18, 22, 25, 32, 41, 45, 51, 52, 53, 61, 62, 63, 64, 65, 66, 67, and 68. In response to the Examiner's objection to the drawings, Applicant has amended the specification to add the reference characters previously included on the drawings but not mentioned in the description, namely 4, 18, 22, 25, 32, 41, 45, 51, 52, 53, 61, 62, 63, 64, 65, 66, 67, and 68.

Applicant has amended Figs. 1, 2, and 6 to correct the spelling of "Led" to --Lead--.

#### **Specification**

In the Office Action, the Examiner objected to the disclosure because of informalities, including "week" in paragraph 4 and "led" at various paragraphs, including paragraph 19. In response, Applicant has corrected the spelling of "week" to --weak-- at paragraph 7 (as published). In response, Applicant has corrected the spelling of "led" to --lead-- at paragraphs 25, 26, 30, 31 (as published) and Figs. 1, 2, and 6, and has corrected "forth" to --fourth--,

added "a" twice, and at paragraph [0022] added an apostrophe, all to correct typographical or grammatical errors without adding any new matter.

### **Claim Objections**

In the Office Action, the Examiner objected to the numbering of the claims and the inclusion of reference numerals that are not enclosed in parenthesis. In response, Applicant has renumbered the claims and enclosed reference numerals within parenthesis.

### **Claim Rejections**

#### **35 U.S.C. 112**

In the Office Action, the Examiner rejected claims 1-10 as failing to define the invention in the manner required by 35 USC 112. Applicant has amended claims 1-10 to more clearly define the present invention. No new matter has been introduced. Applicant therefore requests withdrawal of the Examiner's rejection under 35 U.S.C. 112.

#### **35 U.S.C. 102**

In the Office Action, the Examiner has rejected claims 1-2 as being anticipated by Georgi et al. (US 5,571,962). Applicant respectfully traverses the rejection for the reasons outlined below. As claimed in claims 1 and 2, the present invention includes an analytical tube with at least one sensor placed proximate the analytical tube, and an auger for conveying the drilling cuttings through the analytical tube, past the at least one sensor. Applicant respectfully submits that Georgi et al. does not teach each and every element of claims 1 and 2. Therefore, withdrawal of the rejection is respectfully requested.

In the Office Action, the Examiner has rejected claims 3, 6, and 7 as being anticipated by Sharma et al. (US 6,220,371). Applicant respectfully traverses the rejection for the reasons outlined below. As claimed in claim 3 and 6, dependent from claim 1, the present invention includes an analytical tube with at least one sensor placed proximate the analytical tube, and an auger for conveying the drilling cuttings through the analytical tube, past the at least one

sensor. As claimed in claim 7, the present invention includes an auger, which is not taught by Sharma et al. Applicant respectfully submits that Sharma et al. does not teach each and every element of claims 3, 6, and 7. Therefore, withdrawal of the rejection is respectfully requested.

In the Office Action, the Examiner has rejected claim 5 as being anticipated by Davis et al. (US 4, 536,713). Applicant respectfully traverses the rejection for the reasons outlined below. As claimed in claim 5, dependent from claim 1, the present invention includes an analytical tube with at least one sensor placed proximate the analytical tube, and an auger for conveying the drilling cuttings through the analytical tube, past the at least one sensor. Applicant respectfully submits that Davis et al. does not teach each and every element of claim 5. Therefore, withdrawal of the rejection is respectfully requested.

In the Office Action, the Examiner has rejected claims 8 and 9 as being anticipated by Eckels (US 3,802,259). Applicant respectfully traverses the rejection for the reasons outlined below. As claimed in claim 8, dependent from claim 1, the present invention includes an analytical tube with at least one sensor placed proximate the analytical tube, and an auger for conveying the drilling cuttings through the analytical tube, past the at least one sensor. As claimed in claim 9, dependent from claim 7, the present invention includes an auger, which is not taught by Eckels et al. Applicant respectfully submits that Eckels et al. does not teach each and every element of claims 8 and 9. Therefore, withdrawal of the rejection is respectfully requested.

In the Office Action, the Examiner has rejected claim 10 as being anticipated by Rhyne, Jr. (US 4,659,676). Applicant respectfully traverses the rejection for the reasons outlined below. As claimed in claim 10, dependent from claim 1, the present invention includes an analytical tube with at least one sensor placed proximate the analytical tube, and an auger for conveying the drilling cuttings through the analytical tube, past the at least one sensor. Applicant respectfully submits that Rhyne Jr. does not teach each and every element of claim 10. Therefore, withdrawal of the rejection is respectfully requested.

**35 U.S.C. 103**

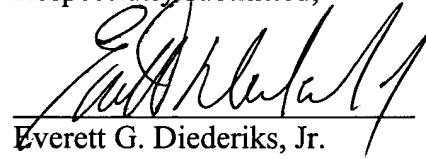
In the Office Action, the Examiner has rejected claim 4 as being unpatentable over Sharma et al (US 6,220,371) in view of Georgi et al. (US 5,571,962). Applicant respectfully incorporates his previous arguments against Sharma et al. and Georgi et al. from above. Applicant respectfully submits that claim 4, depending from claim 1, is patentable as depending from claim 1, which is patentable. Therefore, withdrawal of the rejection is respectfully requested.

Applicant submits that the application is now in condition for allowance, and favorable action to that end is respectfully requested.

A Petition for a Three-Month Extension of Time is enclosed under separate cover.

The Commissioner is hereby authorized to charge any additional fees, and credit any over payments to Deposit Account No. 04-1075.

Respectfully submitted,



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